

The Role of Industry as a Partner in Providing Innovative Leadership to Guide the Education and Training of a High Quality Workforce in a Rapidly Changing Industry

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Abstract

Over the past decade, a large number of graduates who enter the workforce do not possess all the skill sets required by the industries. Educational institutions have not been able to prepare the students to face the demands of the workplace. Ideally all students who complete their schooling should have acquired the skills needed for employment however this is not the situation prevailing among the educated youth. The students need the following skills to excel in the workforce: reflective thinking, problem solving skills and personal effectiveness; which are not part of the curriculum. Today the industry has awakened to its role in the society to collaborate with educational institutions to help the students make a smooth transition to the world of work. This paper examines the efforts of Everonn Systems India Ltd., an industry dealing with education, collaborating with educational institutions to train the younger generation to adapt to the complex demands of a work environment effortlessly. The skills imparted to the youngsters prior to placement will improve their prospects and develop their confidence to compete in the emerging job markets. The quality of a workforce is determined by such skilful applicants. Quality workforce will increase profitability and enhance the corporate image.

Key words : Workforce/ Employability skills/ Industry and Educational Institutions collaboration/ Employer/ Employee/ Transition/ Educational Institutions/ Job market/ Employment/ Developmental Tasks/ Manpower

Background

Fresh graduates find it difficult to make a smooth transition from college to work environment. According to industry estimates, in India, only a quarter of all graduates are employable and about 80% of job seekers

in employment exchange are without any professional skills. The problem lies in quality and not quantity of manpower (Duggal, 2005).

The major reason for the above trend is that the students are not specifically prepared by educational institutions

for the demands of a work environment. Whereas, several studies indicate that enhancing the skills of the workforce is primarily achieved through education and training (Borghans, Green & Mayhew, 2001). Thus educational institutions have the main responsibility of providing graduates with fundamental workplace skills which would contribute to their achievement as a young adult. It is important to understand the nature of skill gaps and what causes them in order to develop sound employment, education, and training practices (Shah & Burke, 2005).

In the light of the above background, it was thought meaningful to explore the relationship between quality workforce (i.e. employees whose employability skills meet the expectations of their employers) and the education they receive from college and the training they receive from their workplace.

The objectives of the present study are to:

1. Determine the importance of different skills as per the employer's viewpoint
2. Identify the employability skills that the graduates are lacking from an employer's perspective
3. Identify the skills of the graduates which could be improved after receiving proper training
4. Suggest recommendations for future action with a focus on skills required for the present workforce.

Review of Literature

Employers feel that there is a huge skill gap between what the students are learning in college and what they actually need to be a success in the work environment. Skill gaps are disparities between the skills employers need and the skills that workers have (Sacramento Observer, 2002). The widening gap between an employee's skills and the demands of a workplace is not surprising since the education and training for employees is provided by educational institutions that are always lagging behind industry requirements.

According to Buck and Barrick (1987), "employability skills are the attributes of employees, other than technical competence, that make them an asset to the employer". Sir Brian Corby (1992) says that through a systematic analysis of all the types of jobs undertaken by graduates in their first two years of employment, the following key attributes have been identified: oral/written communication skills, listening skills, job motivation skills, decision making, management of time and work and teamwork.

According to Donald Super (1957), there are five stages in the Theory of Vocational Development. The stage which is of interest to us is the Exploration Stage, which is between 15 to 24 years, where the individual begins to develop an awareness of occupations. The

Table 1: The Seven Vectors of Student Development and the skills related to each task

	7 developmental tasks	Skills
1	Achieving Competence	Developing intellectual competence
2	Managing Emotions	Resolving authority (child/parent, student/professor, employee/employer)
3	Moving through Autonomy toward Interdependence	Becoming self-sufficient, and learning interdependence and team skills
4	Developing Mature Interpersonal Relationships	Learning tolerance for people and their beliefs
5	Establishing Identity	Assessing self interests and becoming aware of one's strengths and weaknesses
6	Developing Purpose	Developing career plans and goals
7	Developing Integrity	Identifying work values to become socially responsible

Source: *Seven Vectors of Student Development - Education and Identity - Chickering, A. W. and Reisser, L. (1993)*

theoretical framework for the present study is Chickering and Reisser's (1993) Theory of Identity Development. Chickering and Reisser's model has materialized from extensive research conducted with students aged 17 to 24 years and focuses on the developmental tasks a student undergoes during the transition from an adolescent to a young adult and the development task he/she needs to determine before a career option can be made:

In the Indian context, the children in the age group of 17 to 24 years are still in college. The Indian education system gives more importance to academics and linguistic skills and lays less emphasis on practical education which hinders the student's on-the-job application, reasoning skills, problem-solving skills, etc. India produces 400,000 technically trained graduates a year, but many are deficient in areas of specific technical skills, teamwork, and language (Duggal, 2005). As the level of preparedness of young graduates' employability skills could affect their professional development, it is the responsibility of the educational institutions to collaborate with the employers (industry) to conceive and implement a program which would provide the students the necessary employability skills to aid them in their career aspirations.

Research Questions

- Does education provide the students with the necessary skills to help them make a smooth transition from college to work?
- Does training improve the employability skills of the candidates?
- Does collaboration between industry and educational institution promote quality workforce?

Hypothesis

Training enhances the employability skills of the employees.

Sample and Method of Study

Following an extensive review of literature, two questionnaires were developed. The questionnaires used a four-point Likert-type scale that focused on the objectives of the research. Table 2 gives a description of the questionnaires:

The questionnaires were e mailed to 50 employees and 50 employers. The respondents for this study were (a) graduate employees and (b) employers of different sectors (education, hotel industry, pharmaceuticals, marketing). Twenty one (42%) employers and 30 (60%) graduate employees responded to the questionnaires. Table 3 gives the details of the respondents:

Table 2: Description of the questionnaire

Employee Questionnaire
The response scale for this questionnaire was as follows: 4 = very good/ 3 = good/ 2 = satisfactory/ 1 = requires improvement.
Rates the graduate's perception of the skills they had acquired from college and rates the same skills after time spent in a work atmosphere
Employer Questionnaire
Part I - The response scale for this questionnaire was as follows: 4 = very good/ 3 = good/ 2 = satisfactory/ 1 = requires improvement.
Because of the problem which could arise in self ratings, the employers were also requested to assess the employability skills of their employees freshly out of college and after spending minimum six months in a work atmosphere.
Part II - The response scale for this questionnaire was as follows: 4 = very important/ 3 = important/ 2 = less important/ 1 = not at all important.
Rates the importance allocated to the skills required in a candidate from employer's perspective.

Table 3: Details of the respondents

	30 out of 50 Employees	21 out of 50 Employers
Age	24 to 27 years	35 – 50 years
Female	63% female	43% female
Male	37% male	57% male
Educational Qualifications	60% Arts graduates	
	40% Science graduates	
Experience	100% had 1 year job experience	
Salary	Salary ranged from Rs.7000 - Rs.10,000	
Occupation	40% executives	24% heads of department
	27% coordinator	48% managerial position
	27% faculty members	28% director position
	6% data entry operators	
		70% were from public sector
		30% were from private sector

Baseline Data

- *Objective One: Determine the level of importance of different employability skills as per the employer’s perspective.*

Reading from Figure 1, we can conclude that the employers feel that all the skills have almost equal weightage ranging from important to very important.

Developing integrity: 76% of the employers had rated this ability as the most important skill.

Interpersonal skills: 62% to 71% of the employers agreed that ability to build rapport with team members, ability to cooperate and work with others and willingness to listen to others as very important skills.

Analytical skills: 57% to 67% agreed that ability to think coherently in handling daily tasks, ability to identify problems and offer suitable solutions and ability to prioritize the problems in order to offer a solution was very important skills.

Intrapersonal skills: 57% to 62% employers had rated the ability to behave well in a social setup; ability to persevere, ability to work well in a stressful environment and a good sense of dressing and personal hygiene as very important skills.

Developing purpose: 52% to 57% felt that ability to know one’s strengths and weakness and set goals and prioritize work was very important.

- *Objective 2: Identify the employability skills lacking in the graduates – from an employer’s perspective:*

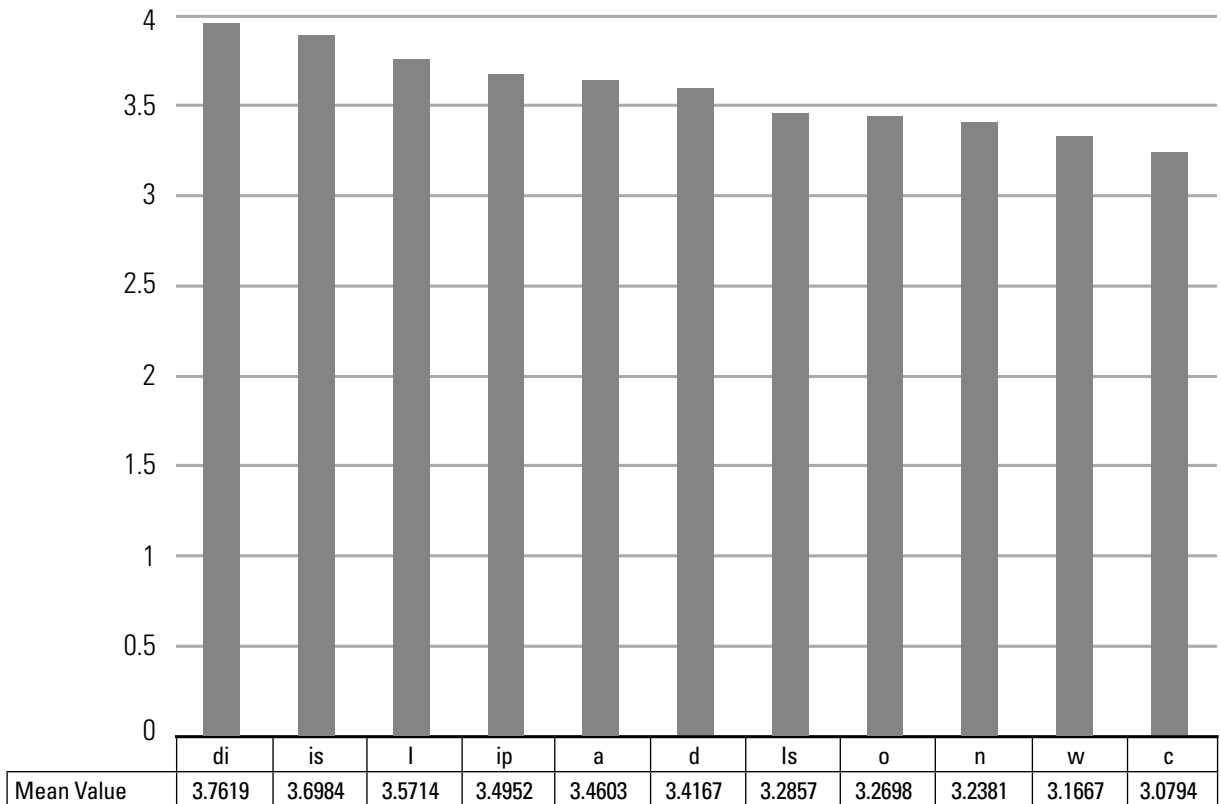
Table 4 proves that before getting trained most of the employability skills of the graduates are in the “satisfactory” level.

Table 4: Identifying the employability skills lacking in graduates – employer’s perspective

	Mean	Std. Deviation
Oral communication skills	2.6889	.64287
Written communication skills	2.8333	.71116
Listening skills	2.8333	.79148
Computer skills	2.9222	.95766
Numeric competency	2.5333	.90909
Analytical skills	2.5556	.67429
Intrapersonal skills	2.8933	.55766
Leadership skills	2.8000	.64327
Interpersonal skills	3.0889	.66628
Developing purpose	2.6167	.65894
Developing integrity	3.2333	.72793

4 = very good/ 3 = good/ 2 = satisfactory/ 1 = requires improvement.

Figure 1 : Employers’ rating of the employability skills on the level of importance



o – oral communication skills / **w** – written communication skills / **l** – listening skills/ **c** – computer skills/
n – numeric competency/ **a** – analytical skills/ **ip** - intrapersonal skills/ **ls** – leadership skills/
is – interpersonal skills/ **d** – developing purpose/ **di** – developing integrity

The satisfaction level for “developing integrity” is the highest (Average=3.23, S.D=0.72). The satisfaction level for “Numeric Competency” is lowest (Average=2.53, S.D.=0.90), followed by “Analytical skills” (Average=2.55, S.D.=0.67) and “Developing Purpose” (Average=2.61, S.D.=0.65). The next lowest satisfaction level is that of “Oral communication skills” (Average=2.68, S.D.=0.64). The satisfaction level of the employer with regard to the employee’s “Written communication skills” and “Listening skills” remained the same (Average=2.833)

Employers were also dissatisfied with the leadership skills of the employees ((Average=2.80, S.D.=0.64).

Statistical Analysis

- *Objective 3: Identify the skills of the graduates which could be improved after receiving proper training:*

The comparison, of employability skills before and after training from an employer’s perspective, was done using paired sample t Test. .05 was set for testing the level of mean differences.

Table 5: Comparing the employability skills of the graduates before training and after training from an employer's perspective

Skills	Mean	Mean Diff.	t		Sig. (2 tailed)
	Before Training	After Training			
Oral communication skills	2.6889	3.5111	.8222	7.370	<.001
Written communication skills	2.8333	3.5333	.7000	7.918	<.001
Listening skills	2.8333	3.6000	.7667	6.707	<.001
Computer skills	2.9222	3.7333	.8111	5.389	<.001
Numeric competency	2.5333	3.3667	.8333	7.196	<.001
Analytical skills	2.5556	3.4333	.8778	7.510	<.001
Intrapersonal skills	2.8000	3.6200	.7267	11.626	<.001
Leadership skills	2.8000	3.5267	.7267	8.245	<.001
Interpersonal skills	3.0889	3.6778	.5889	7.571	<.001
Developing purpose	2.6167	3.5500	.9333	9.181	<.001
Developing integrity	3.2333	3.7667	.5333	5.757	<.001

Table 5 presents mean differences among various skills between before and after training. It can be seen from Table 5 that the differences between before and after mean scores of all the skills are significant (p-value <.001). The significance of difference was tested by using Students t (t). The t values are significant in favour of mean scores for the after training of the employability skills.

- *Does education provide the students with the necessary skills to help them make a smooth transition to work?*

From Table 5, we can infer that the employers surveyed were of the opinion that employees straight from college did not have the necessary employability skills thus proving that education does not provide the students with skills required to satisfy the job requirements. We can see from Figure 2 that the employability skills of a graduate fresh out of college are between the "satisfactory" to "good" scores.

In fact the fresh graduates have themselves rated the following skills as not up to the standard of the employer's expectations: Most of them felt that their ability to comprehend data and to coherently handle daily tasks and identify problems to offer suitable solutions was between the "satisfactory" and "requires improvement" levels.

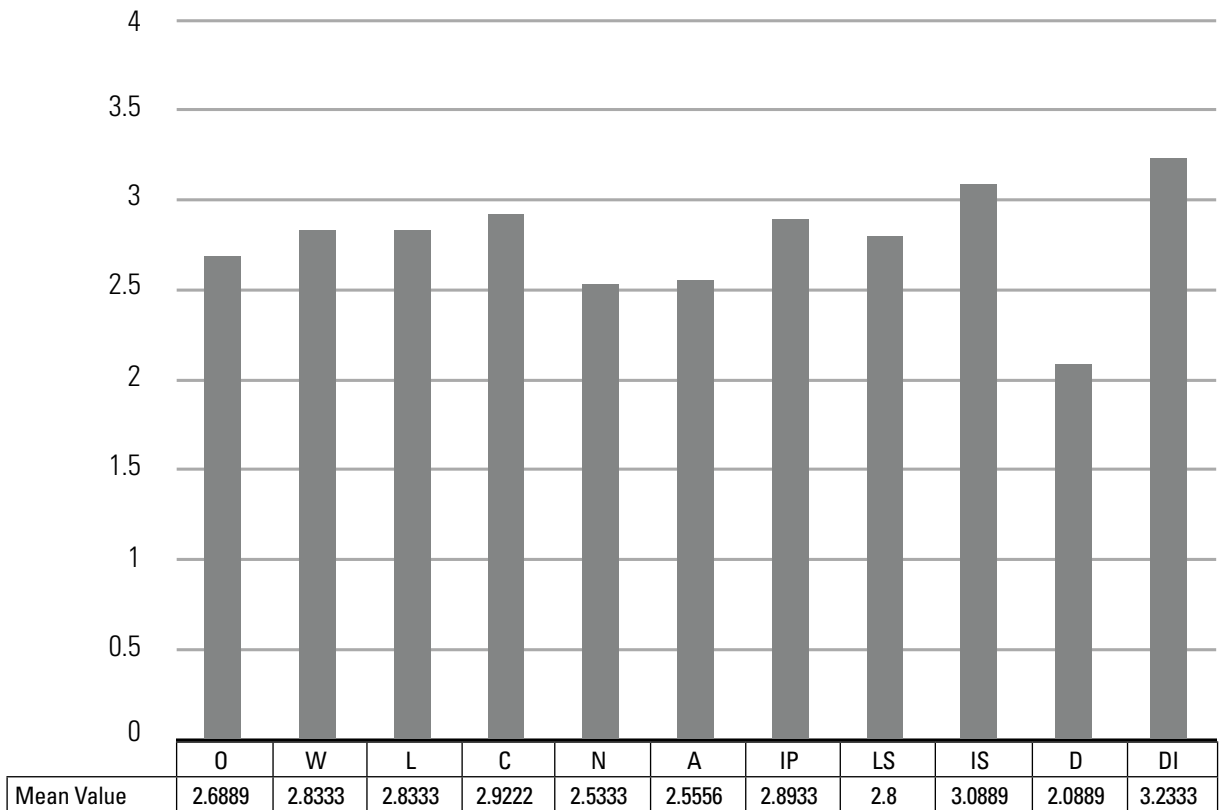
Nearly everyone felt that they did not have adequate knowledge of presentation skills, basic communication skills and to identify their own strengths and weaknesses.

- *Does training improve the skills of the candidates?*

The graduates' competency in the employability skills before getting trained with regard to the importance of the skills from an employer's perspective has been graphically represented as quadrants with a midpoint of 2.5 on the 4-point response scale in Figure 3. We can see from Figure 3, that only listening skill is in the 'important skill and high competence' quadrant. Fresh graduates show very low competence in the other important skills.

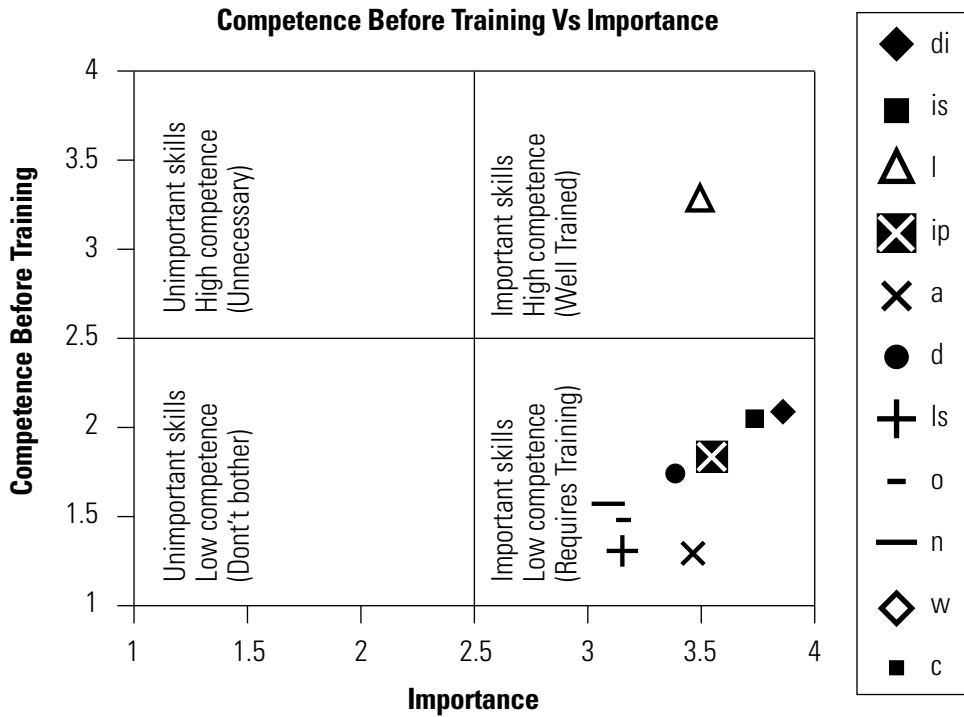
Figure 4 gives the quadrants for competency in the employability skills of the graduates after training vs the importance of the skills from an employer's perspective. Figure 4 indicates that after training the competence level in all the skills has greatly improved. Therefore, it confirms that a training program would greatly improve the graduate's chances of doing well in a work environment. The training program should cover all the skills which were found inadequate in the young graduates by their employers.

Figure 2 : Graduates' rating of the employability skills before joining a work environment



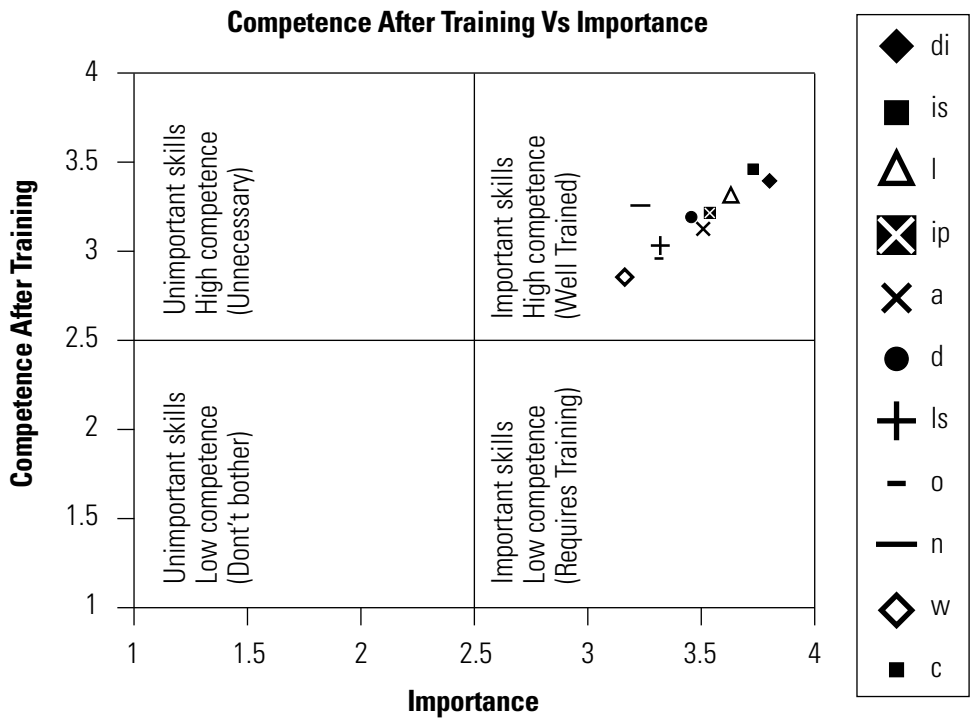
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is – interpersonal skills/ **d** – developing purpose/ **di** – developing integrity

Figure 3: Comparison of the employer's perspective of the graduate's competence in employability skills before training with the employer's rating of the importance of the employability skills



o – oral communication skills / **w** – written communication skills / **l** – listening skills/ **c** – computer skills/
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Figure 4 : Comparison of the employer’s perspective of the graduate’s competence in employability skills after training with the employer’s rating of the importance of the employability skills



o – oral communication skills / **w** – written communication skills / **l** – listening skills/ **c** – computer skills/
n – numeric competency/ **a** – analytical skills/ **ip** - intrapersonal skills/ **ls** – leadership skills/
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- *Does industry and educational collaboration promote quality workforce?*

The results of the study described above confirm that the skills of the candidates can improve if proper training is given. It also confirms that employers are the best people to consult in order to provide a training program which will complement the academic skills of the students with employability skills. The very first step towards the same took place when “The School of Employability” formally run by the Reliance division NIS Sparta, was launched in Chennai in 2006. Such training schools have enhanced the employability of fresh graduates by equipping them with the necessary skills. Many such initiatives are being taken by other industries like Tata Consultancy Services (TCS) who are taking pre and post employment initiatives for enhancing employability. Apart from this, NASSCOM has launched various programmes which ensure the transformation of labour force into an employable workforce.

Unimportant skills

High competence (Unnecessary)

Important skills

High competence (Well Trained)

Unimportant skills

Low competence (Don't bother)

Important skills

Low competence (Training Required)

However, research has confirmed that college students develop along Chickering and Reisser's vectors during their college life (Cooper, Healy, & Simpson, 1994; Martin, 2000; Straub, 1987). Therefore it is vital that

students in the age group of 17 to 24 be effectively trained in their developmental tasks in order to facilitate their smooth transition from college to vocation. Everonn Systems has taken the leadership role in conceiving a program incorporating the different skills found lacking in the graduates in order to make a smooth entry into professional life.

Table 6 gives the charter of the developmental tasks in a student's life. In the first year, the student has to master the first four developmental tasks. By the second year, the dominating developmental task is establishing identity. In the third year, the dominating developmental tasks are developing purpose and integrity (MacKeracher. D., 1996).

The above charter forms the base for Everonn's training program which is divided into three modules comprising the following components:

- In the first year, the module will help the students to enhance their interpersonal skills and develop their communication skills.
- In the second year, the module will help the students clearly assess their strengths and weaknesses.
- In the third year, the module will help the students to have a broad understanding of the career options and the steps they have to take to make the right choice.

The program takes into consideration all the skills that have been found lacking in job applicants. Transcending time and space, Everonn provides an interactive virtual classroom where the instructor delivers the class from the studio end to students spread across geographic locations. Satellite system facilitates the

Table 6: The charter of development tasks in the lives of college students

I year	II year	III year
Achieving competence		Developing purpose
Managing Emotions		
Moving from dependence to autonomy to interdependence	Establishing Identity	
Developing Mature Interpersonal relationships		Developing Integrity

Source: *Development of Young Adults - Mackeracher. D. (1996)*

dissemination of knowledge to the rural and even the remote population.

Conclusions

Within the limitations of the study, the following conclusion was drawn:

1. The base data showed that the employees, at the time of employment, possessed acceptable levels of all the employability skills.
2. Training further significantly enhances the employability skills of the employees
3. Education alone does not equip the students with the necessary skills to make a smooth transition to work; however, in collaboration with industry, education can train the students to gain the necessary skills to meet the requirements of the job market.

We find that the graduates coming out of their college are ill equipped to face the demands required in their workplace. This includes the following skills: communication skills, computer skills, numeric competency, analytical skills, intrapersonal skills, leadership skills, interpersonal skills, skills to develop purpose and integrity. The candidates have not been trained in any form to face the demands of the industry and hence face a big challenge in their workplace. So it is inevitable to train the graduates in the above skills before they enter employment in order to make them confident and successful individuals. Everonn believes that its innovative leadership initiative will go a long way to help and guide the young adults to be well equipped for a professional life through their education.

Suggestions for Further Research

This study has laid the foundation for creating a training program which would incorporate the skills needed to help the students make a successful transition from college to work. Further research needs to be undertaken to determine whether the program has really contributed in helping students make a successful transition into the employment field.

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